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ABSTRACT

The relationship between teachers' statements about classroom tasks and the degree of subsequent student engagement were studied to test the influence of teachers' expectations. Task presentation statements made by teachers in 6 reading and mathematics classes for the fourth, fifth, and sixth grades were classified according to 18 categories of expressed beliefs or expectations. Students' subsequent engagement with each task was coded as: (1) clearly engaged; (2) probably engaged; and (3) clearly not engaged. It was expected that engagement would be highest after positive expectation statements and lowest after negative statements. However, student engagement was generally higher when teachers moved directly into tasks than when they began with any presentation statement. Although the data suggested that negative task introductions are counterproductive, the parallel data for positive task introduction produced weak and ambiguous associations. The most likely explanation is that the data reflect the effects of situational factors of each task assignment, rather than the effects of the statements themselves or student motivation. Other factors for consideration in future research include the frequency of motivation attempts, task variables, and the size and design of research studies. (FG)

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RELATIONSHIPS BETWEEN TEACHERS' PRESENTATIONS OF CLASSROOM TASKS AND STUDENTS' ENGAGEMENT IN THOSE TASKS

Jere Brophy, Mary Rohrkemper,
Hakim Rashid, and Michael Goldberger

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Abstract

The possibility that expectations about classroom tasks that teachers communicate to students in the process of presenting tasks to the students might affect student motivation was investigated by correlating the presence/absence of various teacher task presentation statements with subsequent student engagement in those tasks. Contrary to expectation, student engagement was generally higher when teachers moved directly into tasks than when they began with some presentation statement. Teacher presentation statements classified as likely to produce negative student expectations about tasks were associated with lower student engagement on tasks, but there was no corresponding tendency for teacher presentation statements classified as likely to produce positive student expectations about tasks to be associated with high rates of student engagement.

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RELATIONSHIPS BETWEEN TEACHERS' PRESENTATIONS OF CLASSROOM TASKS AND STUDENTS' ENGAGEMENT IN THOSE TASKS[1]

Jere Brophy, Mary Rohrkemper, Hakim Rashid, and Michael Goldberger[2]

Since Rosenthal and Jacobson's (1968) Pygmalion in the Classroom, a great deal of educational research has documented that teachers' expectations can exert self-fulfilling prophecy effects on student achievement and explored the processes mediating these effects by documenting differential teacher treatment of high versus low expectation students (Brophy & Good, 1974). Although this work has concentrated on teachers' expectations for student achievement, Good and Brophy (1978, 1980) have pointed out that, theoretically, self-fulfilling prophecy effects may occur with respect to any student outcome about which teachers communicate consistent beliefs, attitudes, or expectations.

The present study tested the notion that the expectations teachers communicate about classroom tasks will influence students' motivation to engage in those tasks. More specifically, it analyzed the relationships between statements that teachers made about classroom tasks in the process of presenting them to the students and the degree of

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[1]An earlier version of this paper, entitled "Motivation in the Classroom: Teachers' Presentation of Tasks," was delivered (by Rashid) at the annual meeting of the American Educational Research Association, New York City, March, 1982.

[2]Jere Brophy is a senior researcher in the IRT and director of the Classroom Strategy Project. He is a professor of counseling and educational psychology in MSU's College of Education. Mary Rohrkemper is an assistant professor in the Institute of Child Study/Department of Human Development, University of Maryland and a former IRT research intern. Hakim Rashid is a former postdoctoral fellow in the Women and Minorities Program. Michael Goldberger is a former IRT visiting scholar.

student engagement subsequently observed on those same tasks. This research is part of a larger investigation of motivation in the classroom that considers not only the traditionally investigated person variables (needs, motives) and incentive variables, but also task variables (characteristics of tasks that affect the degree to which they are perceived as interesting, challenging, or worthwhile) and teacher presentation variables (teacher comments made in the process of presenting tasks to students that communicate expectations about the degree to which the tasks are likely to be interesting, challenging, or worthwhile). This paper describes the presentation statements made by six teachers when introducing 165 tasks to their students, and relates these task presentation data to data on the students' subsequent attention and task engagement.

Method

Reading and math lessons were observed (8-15 times each) in two fourth-grade, two fifth-grade, and two sixth-grade classes in a school serving a working class population in a small midwestern city. Reading and math were taught consecutively in the mornings. Typically, each reading or math period was subdivided into two to four tasks. For example, a math period might begin with a review of the previous day's seatwork/homework assignment, followed by presentation of a new concept or skill, followed by presentation of a new assignment to be done as seatwork or completed as homework if necessary.

Prior to formal data collection, observers visited each class several times to familiarize themselves with the teachers, the students, and the daily routines, and to identify the tasks that were

typically included in reading and math instruction. They also developed coding reliability, working in pairs until a criterion of 80% intercoder agreement was reached, and then working alone thereafter to collect the actual data to be used in the study.

Teacher presentation data and student engagement data were collected for each task observed. For the teacher presentation data, the observers recorded verbatim any beliefs, attitudes, or expectations that the teachers communicated about the task (as opposed to procedural or instructional statements made in the process of teaching the task, which were not recorded). Later, these verbatim reports of teachers' presentation statements were coded for presence or absence of the 18 categories listed below.

1. None (teacher launches directly into the task with no introduction)
2. Cues effort (urges students to work hard)
3. Continuity (teacher notes relationship between this task and previous work students have done)
4. Recognition (teacher promises that students who do well on the task will be recognized with symbolic rewards, hanging up of good papers in the classroom, etc.)
5. Extrinsic reward (teacher promises reward for good performance)
6. Threats/punishment (teacher threatens negative consequences for poor performance)
7. Accountability (teacher reminds students that the work will be carefully checked or that they will be tested on the material soon)
8. Time reminder (teacher reminds students that they only have limited time to get the assignment done so they had better concentrate)
9. Embarrassment (teacher tries to show the importance of the task to the students, but does this in a negative way, indicating that they are likely to be embarrassed at some time in the future if they do not learn the skills involved)

10. Apology (teacher apologizes to the students for foisting this task on them)

11. Cues negative expectation (teacher indicates directly that the students are not expected to like the task or to do well on the task)

12. Challenge/goal setting (teacher sets some goal or challenges the class to try to attain a certain standard of excellence)

13. Teacher personalizes (teacher expresses personal beliefs or attitudes directly, or tells the students about personal experiences that illustrate the importance of this task)

14. Teacher enthusiasm (teacher directly expresses his or her own liking for this type of task)

15. Self actualization value (teacher suggests that students can develop knowledge or skill that will bring pleasure or personal satisfaction)

16. Survival value (teacher points out that students will need to learn these skills to get along in life or in our society as it is constructed presently)

17. Personal relevance--other (teacher makes some other kind of statement that tries to tie the task to the personal lives or interests of the students)

18. Cues positive expectation (teacher states directly that the students are expected to enjoy the task or to do well on it)

Each category that applied was coded "present," so that multiple codes appeared whenever more than one category was included in the teacher's presentation. This categorization was done independently by two coders, who later resolved disagreements by discussion.

Students' task engagement was coded twice for each task, once five minutes into the task, and once again ten minutes later. Each individual student was coded as clearly engaged, probably engaged, or clearly not engaged in the task, and the percentages of the class in each of these three categories were computed later and used for

analyses. These task engagement percentages were correlated with the teacher presentation scores, in the expectation that engagement would be highest following teacher presentation statements suggesting positive expectations and lowest following teacher presentation statements suggesting negative expectations.

Results

Table 1 gives the frequencies and percentages with which each teacher used the 18 content categories in introducing tasks (note that percentage data are referenced according to the number of tasks rather than the total number of task presentation codes made for each teacher, so that totals exceed 100% because of multiple presentation codes for some tasks). As a group, the teachers made no presentation statement at all for 49 (30%) of the 165 tasks coded. The presentation statements made for the remaining 116 tasks yielded 206 category "presence" codes, or almost two per task. Thus, although teachers jumped right into tasks without any introduction at all 30% of the time, the task presentations they gave the other 70% of the time were lengthy and substantial enough to include, on the average, mention of two separate considerations likely to affect student motivation.

The task presentation categories can be classified as positive, neutral, or negative with respect to their probable effects on student motivation. However, reliance on different theoretical perspectives will produce different classifications. For example, if emphasis is placed upon what is implied about the task itself or the students' probable subjective experience when engaged in the

Table 1

Frequencies and Percentages* of Task Introduction Codes for the Six Teachers

Category	No. of Tasks	Task Introduction Codes T_1	T_2	T_3	T_4	T_5	T_6	Total
		50	16	30	26	22	21	165
1. None		13 (26)	4 (25)	10 (33)	12 (46)	9 (40)	1 (5)	49 (30)
2. Cues effort		3 (6)	1 (6)	4 (13)	7 (27)	5 (23)	4 (19)	24 (15)
3. Continuity		7 (14)	6 (38)	1 (3)	5 (19)	0 (0)	7 (33)	26 (16)
4. Recognition		3 (6)	3 (19)	1 (3)	0 (0)	0 (0)	0 (0)	7 (4)
5. Extrinsic Reward		1 (2)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	2 (1)
6. Threat/Punishment		6 (12)	2 (13)	0 (0)	0 (0)	3 (14)	1 (5)	12 (7)
7. Accountability		5 (10)	3 (19)	3 (10)	1 (4)	2 (9)	4 (19)	18 (11)
8. Time Reminder		8 (16)	4 (25)	1 (3)	0 (0)	0 (0)	1 (5)	14 (9)
9. Embarrassment		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10. Apology		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	1 (1)
11. Cues Negative Expectation		11 (22)	1 (6)	1 (3)	1 (4)	5 (23)	1 (5)	20 (12)
12. Challenge/Goal Setting		13 (26)	1 (6)	1 (3)	1 (4)	0 (0)	1 (5)	17 (10)
13. Teacher Personalizes		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
14. Teacher Enthusiasm		3 (6)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	4 (2)
15. Self Actualization Value		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
16. Survival Value		1 (2)	3 (19)	7 (23)	0 (0)	0 (0)	1 (5)	12 (7)
17. Personal Reference-Other		3 (6)	0 (0)	3 (10)	0 (0)	1 (5)	0 (0)	7 (4)
18. Cues Positive Expectation		14 (28)	5 (31)	9 (30)	3 (12)	1 (5)	10 (48)	42 (26)
Totals		91	33	42	30	28	31	255

*Percentages in parentheses

task, positive motivational effects can be predicted for the categories "teacher personalizes," "teacher enthusiasm," "self-actualization value," "personal reference," and "cues positive expectation," and negative effects can be predicted for the categories of "apology" and "cues negative expectation," with the remaining categories classified as neutral. On the other hand, if attention is shifted from the task itself to the consequences of success or failure on the task, several categories can be classified as positive because they promise rewards ("recognition," "extrinsic reward," "self actualization value," "survival value," "personal reference"), others can be classified as negative because they threaten punishment for failure on the task ("threat/punishment," "accountability," "embarrassment"), and the remaining categories would be classified as neutral because they imply neither reward nor punishment.

Consideration of the data in Table 1 in the light of these classifications makes it clear that teachers (at least these six teachers) do not systematically take advantage of opportunities to present tasks in a positive light, and sometimes even present them in a negative light. Regarding statements about the task itself, 53 of the 206 codes were classified as positive, 132 as neutral, and 21 as negative. Regarding statements about consequences for success or failure at the task, 28 statements were coded as positive, 148 as neutral, and 30 as negative. Considering both classification systems simultaneously results in classification of 74 statements as positive, 81 as neutral, and 51 as negative. Teachers did try to cue positive expectations prior to about one-fourth of the tasks, but otherwise made little use of opportunities to develop student motiva-

tion. In particular, none of the teachers was ever observed attempting to make students aware that they could derive personal satisfaction or self actualization value from a task.

Student Engagement

To assess relationships between teacher presentation codes and student engagement rates, correlations were computed for each teacher, based on samples of tasks varying from 16 to 50. The task presentation codes for each task were linked with the student engagement data for the same task, and then correlated across all of the tasks observed in each classroom. This produced six sets of correlations for each classroom, because there were three engagement measures based on observations done five minutes into the task, and three more based on observations done 15 minutes into the task. However, these correlations regularly revealed similar patterns across the six student engagement measures. That is, although there were differences in strength of relationship and level of significance, particular task presentation variables tended to correlate (if at all) negatively with the measures of student engagement and positively with the measure of off-task and disruptive behavior, or vice versa. Thus, in general, each set of coefficients (for which data were available to compute correlations) could be described as indicating a positive relationship, a negative relationship, or no relationship between the task presentation variable and the degree of student engagement in the task.

This information is summarized in Table 2, where a plus (+) sign indicates at least one significant correlation representing

Table 2

Relationships Between Task Presentation Codes and Student Engagement Codes.[1]

Classification Based on Task Itself	Classification Based on Consequences		Categories	Task Introduction Codes T_1	T_2	T_3	T_4	T_5	T_6	Total Positive	Total Negative
Neutral	Neutral	1.	None	+	-	+	+	0	0	3	1
Neutral	Neutral	2.	Cues Effort	0	N	0	0	0	0	0	0
Neutral	Neutral	3.	Continuity	0	0	N	0	N	0	0	0
Neutral	Positive	4.	Recognition	0	0	0	N	N	N	0	0
Neutral	Positive	5.	Extrinsic Reward	0	N	0	N	0	N	0	0
Neutral	Negative	6.	Threat/Punishment	-	0	N	N	-	-	0	3
Neutral	Negative	7.	Accountability	0	0	0	0	0	-	0	1
Neutral	Neutral	8.	Time Reminder	-	+	0	N	N	-	1	2
Neutral	Negative	9.	Embarrassment	N	N	N	N	N	N	N	N
Negative	Neutral	10.	Apology	N	N	N	N	0	N	0	0
Negative	Neutral	11.	Cues Negative Expectation	0	N	N	0	0	-	0	1
Neutral	Neutral	12.	Challenge/Goal Setting	-	N	-	-	N	0	0	3
Positive	Neutral	13.	Teacher Personalizes	N	N	N	N	N	N	N	N
Positive	Neutral	14.	Teacher Enthusiasm	0	N	-	N	N	N	0	1
Positive	Positive	15.	Self Actualization Value	N	N	N	N	N	N	N	N
Neutral	Positive	16.	Survival Value	0	0	0	N	N	-	0	1
Positive	Positive	17.	Personal Reference - Other	+	N	0	N	0	N	1	0
Positive	Neutral	18.	Cues Positive Expectation	0	0	0	0	0	0	0	0

[1] Based on correlations of presence/absence codes for the task presentation categories with codes expressing the percentage of students in the class who were attentive or engaged in the activity. Plus (+) signs indicate significant ($p < .05$) positive relationships; minus (-) signs indicate significant negative relationships; zeros (0) indicate no significant relationship; and (N) indicates "no data" (correlations could not be computed because category was not used).

a positive relationship between the task presentation variable and student engagement on the task, and a minus (-) sign indicates at least one significant correlation representing a negative relationship between the task presentation variable and student engagement on the task. The findings summarized in Table 2 are not at all what we expected.

The data for Category 1 (no attempt to motivate the students) showed three p :itive and one negative relationship with student engagement measures, of a total of six possible relationships examined. Thus, for three of the teachers, student engagement was higher when they plunged directly into the task than when they began with some kind of presentation statement.

For the other 17 categories representing positive, neutral, or negative statements about tasks, only 14 of a possible 52 relationships reached statistical significance, and 12 of these were negative relationships. That is, most relationships indicated *lower* student engagement when teachers made some statement about the task than when they did not.

Categorization of the relationships, shown in Table 2 according to whether the teacher presentation statements were classified as positive, neutral, or negative, yields weak support for our original expectations. Classification based on expectations about the task itself yields one positive and one negative correlation (of a possible 11) for presentation statements classified as positive; one positive and 10 negative correlations (of a possible 36) for presentation statements classified as neutral; and no positive correla-

tions but one negative correlation (of a possible five) for presentation statements classified as negative. With regard to statements about consequences for success or failure on tasks, the data show one positive and one negative correlation (of a possible 12) for presentation statements classified as positive; one positive and seven negative correlations (of a possible 30) for presentation statements classified as neutral; and no positive but four negative correlations (of a possible 10) for presentation statements coded as negative. The data for both classifications indicate that student engagement tended to be highest following positive task presentations and lowest following negative task presentations (with neutral task presentations in between). However, these are nonsignificant minor trends overshadowed by the major finding that student engagement was higher when teachers made no presentation statement at all than when they introduced tasks with comments fitting one or more of the other 17 categories. Furthermore, although the data do suggest that negative task introductions are counterproductive, the parallel data for positive task introductions were weak and ambiguous. Thus, this research does not provide clear support for the hypothesis that positive task introductions will increase student engagement in tasks.

Discussion

These findings are based on only six classrooms, and in many cases on teacher presentation categories that occurred very infrequently, so that they may not be reliable or replicable. This is especially true of the categories classified as positive. Of these,

only the category "cues positive expectation" occurred more than seven times in any one classroom, and most of the other positive categories occurred only one to three times if at all. Thus, the lack of positive relationships between these positive teacher presentations of tasks and subsequent student engagement on those tasks may be due to the general low incidence of positive task presentations.

However, several other factors suggest that the data must be taken more seriously. First, the category "cues positive expectation" was used frequently and yet never correlated significantly with student engagement. Second, although there were only two significant positive correlations with student engagement, there were 14 significant negative correlations, and many of these were based on teacher presentation categories that were used infrequently. The general findings that engagement was higher when teachers moved directly into the task than when they made some presentation statement, and that relationships between presentation statements and student engagement were likely to be negative when they reached significance, held up for five of the six teachers. Thus, this discussion will assume that these relationships reflect real trends likely to be replicated in other classrooms.

Negative correlations with student engagement for teacher presentation categories classified as negative (likely to produce negative student expectations) were expected, of course. However, accepting these correlations requires accepting the general lack of support for the teacher presentation categories classified as positive, and also the frequent negative correlations for teacher presentation categories classified as neutral. What might produce this

pattern of results? Several possibilities suggest themselves.

One possibility is that these six teachers (or five of them at least) were particularly inept at motivating students, to the point that most of their efforts were counterproductive. This is possible, but unlikely. The teachers seemed to be at least average as a group, and student engagement in the activities in their classes was generally high.

A related possibility is that the students in these classrooms were alienated from their teachers, to the point that they not only reacted negatively to accountability pressures and threat of punishment, but also to the teachers' more neutral time reminders or attempts to challenge them by setting goals, and even to more positive approaches such as emphasizing the survival value of an activity or expressing enthusiasm about it (these teacher presentation categories all had at least one negative relationship with student engagement). The viability of this hypothesis is enhanced by the fact that the majority of the students were from working-class rather than middle-class families, and many represented minority groups as well. Yet, the general classroom and school atmosphere seemed positive, and there was little evidence of student alienation from the teachers.

Another possibility (suggested to us by Robert Slavin) is that the teachers who gave more frequent and lengthy task presentations tended to be generally more talkative in the classroom. If so, it is possible that whatever tendency their task presentation statements may have had to enhance student engagement on tasks was undercut later by the teachers' tendency to distract the students with

unnecessary or intrusive comments later on. Or, more simply, there may be a trade-off between the frequency of teachers' motivation attempts and the effectiveness of these attempts. As with teacher praise (Brophy, 1981), students may learn to ignore or discount teacher motivation attempts that are too perfunctory or predictable.

The most likely explanation of these data, in our view, however, is that they reflect the effects of situational factors on both teacher presentation statements and student engagement rates, rather than reflecting effects of teacher presentation statements on student engagement rates. That is, perhaps teachers typically attempt to motivate students only in those situations where they have some reason to believe that such an effort is needed (because the class has become difficult to control or because the teacher senses that the upcoming task is not likely to be well-received by the students). This hypothesis would explain why task engagement was generally higher when teachers moved directly into tasks than when they began by attempting to motivate the students. This notion also fits well with the research on teachers' thinking and decision making during interactive instruction of students. This research indicates that teachers' thoughts tend to concentrate on the flow of instruction established by the activities themselves and the content presentations planned to occur in conjunction with these activities. Typically, teachers shift conscious attention from this activity flow to the students and their responsiveness to the activity only when unanticipated problems develop (Clark & Yinger, 1979; Shavelson & Stern, 1981). Thus, there is some reason to

believe that teachers' planned motivational attempts may be stimulated by anticipated problems with activities, and that their spontaneous motivational attempts may be stimulated by observed problems in the actual situation. If so, this would explain why student engagement was higher when teachers jumped directly into the task than when they began with a motivational attempt, and would help explain why most correlations between motivational attempts and student engagement measures were negative.

The notion that teachers anticipate problems with certain tasks introduces the possibility that our results were affected by variables of the tasks themselves. Along with teacher presentation variables, task variables are a major concern of the larger study of which the present report is a part. Future analyses will focus on task variables in an attempt to identify systematic relationships between features of tasks and rates of student engagement on those tasks. These analyses will focus not only on differences in subject matter (reading vs. mathematics) and order of tasks within the period, but also on specific task attributes such as the type of media employed and the type of response demanded from the student.

A final consideration is that we may have selected too molecular a level of analysis for testing hypotheses about the effects of teachers' communications of beliefs, attitudes, or expectations on students' motivation. It may be that the task as a unit of analysis or student task engagement as a measure of student motivation are so affected by situational or context factors as to mask the effects of (genuine) trends that might be observable at

a more molar level of analysis. Thus, if a large sample of classrooms were studied in a way that allowed classification of teachers according to frequency and style (positive, neutral, or negative) of student motivation attempts, and more global measurement of student motivation (attendance rates, task completion rates, evidence of intrinsic interest in academic content), then orderly relationships suggesting self-fulfilling prophecy effects might be observed.

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